



MAST-172 – Mountain Bike Skills Development

Business

Effective Term & Year: Fall 2022

Course Outline Review Date: 2025-09-01

Program Area: Tourism, Recreation, & Hospitality

Description:

This course is geared towards beginner to advanced riders looking for formal instruction in riding techniques, mountain bike guiding skills, trail building and bike maintenance. Taking place in Fernie, this course utilizes local trails, professional bike guides and mechanics and local trail builders to encompass a complete overview of the employment opportunities in this growing sector.

Program Information:

This course is an elective and is not required for MAST certificate and runs concurrently with MAST 168 Canoe Certification This course is recommended for students who are pursuing Mountain Bike Instructor's certification.

Delivery Methods: On-campus (Face-to-Face), Practicum

Credit Type: College of the Rockies Credits

Credits: 2

Instructional Activity and Hours:

Activity	Hours
Classroom, Directed Studies or Online Instruction	8
Seminar/Tutorials	
Laboratory/Studio	

Practicum/Field Experience	27
Co-op/Work Experience	
Other	
Total	35

Course Requisites:

- Completed or concurrently enrolled in:
 - [MAST168](#) – Canoe Guide Certification (2)

Flexible Assessment: Yes

In some cases students may be able to apply for recognition of prior learning outside the classroom. This flexible assessment process provides equivalent course credit. It is a rigorous process that may include external evaluation, worksite assessment, demonstration, standardized test, self-assessment, interview, products/portfolio, and challenge exam, or other measures as appropriate. Tuition fees apply. Contact an education advisor for more information.

Course Transfer Credit:

For information about receiving transfer credit for courses taken at either British Columbia or Alberta institutions, please see <https://www.bctransferguide.ca/> or <https://transferalberta.alberta.ca> . For more transfer credit information, please visit <https://www.cotr.bc.ca/Transfer>

All requests for course transfer credit from institutions in British Columbia or elsewhere should go to the College of the Rockies Enrolment Services office.

Textbook Resources:

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date the following textbooks were in use:

Zinn & the Art of Mountain Bike Maintenance: The World's Best-Selling Guide to Mountain Bike Repair Paperback – Feb 7 2018 by [Lennard Zinn](#)

Please see the instructor's syllabus or check COTR's online text calculator <https://textbook.cotr.bc.ca/> for a complete list of the currently required textbooks.

Learning Outcomes:

Upon the successful completion of this course, students will be able to

- describe and demonstrate uphill climbing techniques and downhill riding techniques
- ride safely through moderately technical terrain
- assess risks based on rider ability, trail difficulty and bicycle specifications
- choose appropriate terrain for personal and group rides based on risk assessment
- demonstrate basic personal bike maintenance in the shop and on the trail
- recognize sustainable trail design, maintenance and building techniques
- demonstrate basic guiding and group management skills on the trail
- complete risk management protocols in relation to leading group rides

Course Topics:

- Bike and pedestrian safety education
- Parts of a bike
- Bike fit & Body position, balance
- Riding awareness & vision
- Braking & stopping
- Shifting & cadence
- Terrain & Obstacles
- Bike repair & maintenance
- Fitness for riding
- Trail stewardship
- Mountain bike guiding introductory skills

See instructor's syllabus for the detailed outline of weekly readings, activities and assignments.

Evaluation and Assessments

Assessment Type: On-Campus (face-to-face)

Assessment Type	% of Total Grade
Demonstrated competency in bike maintenance skills	25%
Demonstrated progression of competency in overall riding skills	25%
Demonstrated competency in understanding of trail building skills	25%
Demonstrated competency in understanding of group management and guiding skills	25%
Total	100%

Grade Scheme

A+	A	A-	B+	B	B-	C+	C	C-	D	F
>=90	89-85	84-80	79-76	75-72	71-68	67-64	63-60	59-55	54-50	<50

Pass requirements: None

Exam Attendance:

Students must attend all scheduled exams at the appointed time and place. Instructors may approve an alternate exam to accommodate an illness or personal crisis. Department heads will consider other written requests. Any student who misses a scheduled exam without prior approval will receive a "0" on the exam.

Academic Policies:

College of the Rockies policies related to courses can be found at <https://cotr.bc.ca/about-us/college-policies/> and include the following:

- Policy 2.4.3 Students with Documented Disabilities
 - Policy 2.4.4 Student Conduct (plagiarism, other cheating, behavioral misconduct)
 - Policy 2.5.8 Academic Performance
 - Policy 2.5.3 Grade Appeal
 - Policy 2.4.9 Student Concerns Re Faculty
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Course Changes:

The College of the Rockies updates course outlines regularly to meet changing educational, employment and marketing needs. The instructor will notify students in writing of any updates to this outline during the semester. The instructor reserves the right to revise, add or delete material while meeting the learning outcomes of this course outline.